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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/669,855

09/25/2003

Yasuji Mizutani

117323

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25944

7590

03/28/2005

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EXAMINER

LA, ANH V

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/669,855	<b>Applicant(s)</b> MIZUTANI	
	<b>Examiner</b> Anh V La	<b>Art Unit</b> 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/25/03, 4/28/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamura (US 6,493,621).

Regarding claim 1, Tamura discloses a vehicular safety apparatus comprising determining means 30, 138, storage means 106, 108, 110 for storing an amount of brake operation by a driver at a point where the collision prediction level determined by the determining means exceeds a predetermined threshold, as a reference level, and actuation control means 46 for actuating the safety apparatus in accordance with an increase of the amount of brake operation of braking by the driver from the reference level stored in the storage means (column13, lines 20-50).

Regarding claim 2, Tamura discloses prohibiting means for prohibiting the actuation control means from performing a control process if the determining means continuously determines the collision prediction level of not less than a predetermined level for a fixed period (see figures 6-7).

Regarding claim 3, Tamura clearly discloses prohibiting means for prohibiting the actuation control means from performing a control process in at least one of a case

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where a vehicular velocity is a predetermined low velocity including stop state and a case where a gearshift lever is place in a non-forward position.

Regarding claim 4, Tamura discloses on the occasion of carrying out the control of the safety apparatus in accordance with the increase of the amount of brake operation from the reference level, the increase being supposed to be equal, the actuation control means carrying out the control for greater increases in the higher collision prediction level than in the lower collision prediction level (col. 13, lines 20-50).

Regarding claim 5, Tamura discloses minimum control means (col. 13, lines 20-50, fig. 6-7).

Regarding claim 6, Tamura discloses prohibiting means for prohibiting the minimum control means from performing the control if the increase of the amount of brake operation from the reference level is within the range of the predetermined small increase and if the reference level is within a predetermined slow braking range (col. 13, lines 15-50, see fig. 6-7).

Regarding claim 7, Tamura discloses brake control means for generating a brake assist force to increase a braking force according to a braking operation, wherein the actuation control means controls the brake control means to generate a greater brake assist force as the increase from the reference level becomes larger (col. 13, lines 15-50, fig. 6-7).

Regarding claim 8, Tamura discloses the amount of brake operation is a quantity indicating a force of driver's braking operation (fig. 6-7).

Regarding claim 9, Tamura discloses a brake master cylinder 130.

Regarding claim 10, Tamura discloses the determining means determining a larger collision prediction level with decrease in a value of a result of calculation of dividing a distance between the vehicle and the obstacle by a relative velocity of the obstacle to the vehicle (fig. 3).

Regarding claim 11, Tamura discloses the brake control means for generating the brake assist force being comprised of a pump motor for increasing a pressure of a wheel cylinder and a plurality of valves disposed on brake piping (fig. 3).

Regarding claim 12, Tamura discloses a vehicular safety apparatus comprising determining means 30, 138, storage means 106, 108, 110 for storing an amount of brake operation by a driver at a point where the collision prediction level determined by the determining means exceeds a predetermined threshold, as a reference level, brake control means 46 for generating a brake assist force, and actuation control means 46 for determining the brake assist force to be generated by the brake control means based on an increase of the amount of brake operation from the reference level and actuating the brake control means (column13, lines 20-50).

Regarding claim 13, Tamura discloses a brake master cylinder 130.

Regarding claim 14, Tamura discloses the determining means determining the collision prediction level based on a value of a result of calculation of dividing a distance between the vehicle and the obstacle by a relative velocity of the obstacle to the vehicle (fig. 3).

Regarding claim 15, Tamura discloses the determining means determining a greater collision prediction level with decrease in the value of the result of the calculation (fig. 3).

Regarding claim 16, Tamura discloses determining the brake assist force according to an increase of the master cylinder pressure from the reference level, the actuation control means determining a greater brake assist force at the higher collision prediction level than at the lower collision prediction level (col. 13, 15-50, fig. 6-7).

Regarding claim 17, Tamura discloses determining the brake assist force according to an increase of the master cylinder pressure from the reference level if the increase of the master cylinder pressure is less than a predetermined value, the actuation control means actuates the brake control means so as to generate a brake assist force corresponding to the predetermined value (col. 13, lines 15-50, fig. 6-7).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Friederich, Gutta, and Hasegawa teach vehicle control systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh V La whose telephone number is (571) 272-2970. The examiner can normally be reached on Mon-Fri from 9:30am to 6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANH V. LA**  
**PRIMARY EXAMINER**

Anh V La  
Primary Examiner  
Art Unit 2636

AI  
March 02, 2005